

IN THE CLAIMS

List of the pending claims

1. (currently amended) An on-chip system on a substrate comprising:

at least one carrier holding a plurality of parts integral to said at least one carrier;

an assembly area having a cavity provided with alignment posts; and

a transport for moving said at least one carrier to said assembly area, and for moving a subset of said parts to said cavity onto said alignment posts, said plurality of parts being attached to said carrier by filling a gap between said carrier and said plurality of parts with material that is selectively etched with respect to the material that said carrier and said plurality of parts are made of.

2. (previously presented) The on-chip system as recited in claim 1, wherein said transport is provided with a plurality of comb drives engaging gears.

3. (previously presented) The on-chip system as recited in claim 1, wherein said plurality of parts within said cavity are in a pre-assigned order.

4. (currently amended) The on-chip system as recited in claim 1, wherein said alignments form sidewalls of said cavity.

5. (previously presented) The on-chip system as recited in claim 1, wherein said plurality of parts are detached from said carrier after being placed in said cavity.

6. (previously presented) The on-chip system as recited in claim 1, wherein said plurality of parts are attached to said carrier by mechanical tabs.

7. (previously presented) The on-chip system as recited in claim 6, wherein said mechanical tabs are removed by isotropic etch.

8. (previously presented) The on-chip system as recited in claim 6, wherein said mechanical tabs are removed by electrical current that causes mechanical destruction of said tabs.

9. (previously presented) The on-chip system as recited in claim 6, wherein said mechanical tabs are removed by laser ablation.

10. Canceled

11. (currently amended) The on-chip system as recited in claim 1, wherein said carrier is removed from said assembly area after ~~that~~ said parts have been detached.

12. (previously presented) The on-chip system as recited in claim 1, wherein the carrier remains in-situ after detaching said plurality of parts.

13. (previously presented) The on-chip system as recited in claim 1, wherein said plurality of parts and said assembly area are fabricated concurrently and assembled.

14. (previously presented) The on-chip system as recited in claim 1, wherein said transport is controlled by a driver.

15. (previously presented) The on-chip system as recited in claim 14, wherein said driver comprises comb drives coupled to gears.

16. (currently amended) The on-chip system as recited in claim 15, wherein said gears engage matching teeth of said carrier.

17. (previously presented) The on-chip system as recited in claim 16, wherein said gears are

provided with a shoulder to stabilize said carrier.

18. (previously presented) The on-chip system as recited in claim 17, wherein said shoulders ride over said matching teeth positioned on the sides of said carrier.

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